

Published by: Siemens Aktiengesellschaft, Berlin und München
 © 1975 by Siemens Aktiengesellschaft, Berlin und München
 All rights reserved

Editor in Chief: D. Rost, München, Erlangen
 Head of Publishing: E. Pollak, Erlangen, München
 Managing Editors: G. Hübner, Erlangen, München
 and E. Ritter, Erlangen

Printed by: Passavia Druckerei AG, Passau
 Printed in West Germany

Photostats may be made of individual articles, also
 for internal company use, and excerpts of articles reprinted
 on condition that due reference is made to the author and source;
 complete articles, on the other hand, may only be reprinted
 subject to prior permission being obtained from the editors.

Abstracts merely describing the contents of individual articles
 in this journal may be reproduced for documentary purposes and
 distributed free of charge with the usual acknowledgement.

The "Siemens Review" is published monthly.

Price: DM 11 per copy.

Annual subscription (excluding postage): DM 120.

Obtainable only from booksellers.

Please address enquiries to:

Siemens Aktiengesellschaft,
 Redaktion "Siemens Review",
 D-8520 Erlangen, Postfach 3240, Federal Republic of Germany,
 or to our local representatives

Siemens Review

Siemens Aktiengesellschaft · Berlin und München

Vol. XLII 1975

Index 1975

Automation

An Automatic Tester for STD Trunks

Beck, J.; Finfera, W.; Fink, H. 285

Automatic Fraction Collector for Liquid Chromatography

Ecker, E.; Ruschitzka, E.; Schweikert, H. 530

Automatic Pollutant Measuring Network

M. 95

Automatic Tester K1060

Monophonic and Stereophonic Program Circuits

Egna, P.; Reitan, A. 270

Automatic Transmission Measuring and Signaling Testing

Equipment ATME 2 for International Telephone Circuits

Adler, K. 493

Automatically Controlled Unloaders for Seagoing Vessels

Trautnitz, W. 33

Automation in Timber Yards

Albrecht, K.; Sondermann, E. 123

Computer-Controlled AF System for the Exchange

of Radio Programs between Members of the ARD

Knöbel, B.; Wurll, P.; Zeiß, W. 348

Operating Systems of the Siemens 310, 320 and 330

Process Computers for Universal Automation Applications

Benz, W.; Krause, K.-H.; Simang, B. 165

Packaging System D for Data Communication

and Automatic Feedback Control Systems

Szolnoki, G.; Zaunrith, F. 490

Power System Automation

Müller, R. 65

Cables and Wires

Communications Cable for First Electrified Lines

of Korean State Railways

Rachel, H. 358

ETFE-Insulated Wires

Schinko, H. 407

Flat Cables as Transmission Elements for Digital Systems

Schinko, H. 132

Flexible Tubing for Magnetic Shielding

Boll, R.; Keller, H. 366

Local Broadband Communication Networks

Birkenschenkel, H.; Nerenz, W. 216

Mineral-Insulated Cables

Geyer, F. 409

R2020, a Digital Capacitance Unbalance Test Set

for Communications Cables

Fröscher, P.; Schlögl, K. 61

Carrier Systems

ESB400, a New SSB System for Telephony

and Data Communication over Power Grids

Beckermann, H.-G.; Hoffmann, E. 375

Model D/W2007 Precision Level Measuring Setup

for 6 kHz to 18.6 MHz Carrier Systems

Horvat, B.; Rauchenberger, K. 26

New Line of Frequency-Division Multiplex Units

for Carrier Systems

Plügge, H. 29

Uniform Carrier Equipment

for Narrowband, Cable and Radio Relay Systems

Fütterer, H.G. 486

Chromatography

A Process Chromatograph

for the Selective Measurement of Hydrocarbons

Ball, H.; Müller, F. 344

Automatic Fraction Collector for Liquid Chromatography

Ecker, E.; Ruschitzka, E.; Schweikert, H. 530

Communications

An Automatic Tester for STD Trunks Beck, J.; Finfera, W.; Fink, H.	285
Automatic Transmission Measuring and Signaling Testing Equipment ATME 2 for International Telephone Circuits Adler, K.	493
Communications Cable for First Electrified Lines of Korean State Railways Rachel, H.	358
Computer-Controlled AF Systems for the Exchange of Radio Programs between Members of the ARD Knöbel, B.; Wurl, P.; Zeiß, W.	348
Dynamic Behaviour and Drive Control of Large Antennas Simulated by Digital Computer Eschenauer, H.; Henning, G.; Tröndle, H.-P.	209
ESB400, a New SSB System for Telephone and Data Communication over Power Grids Beckermann, H.-G.; Hoffmann, E.	375
FB40, an RC/S System for Long-Distance Communications Networks with Terminals for Display, Printer or Processor Gruchalla, A. v.; Herkert, H.	392
Flat Cables as Transmission Elements for Digital Systems Schinko, H.	132
Local Broadband Communication Networks Birkenschenkel, H.; Nerenz, W.	216
Model D/W 2007 Precision Level Measuring Setup for 6 kHz to 18.6 MHz Carrier Systems Horvat, B.; Rauchenecker, K.	26
Modem N10 for Short-Haul Data Communication Gieck, R.; Grunow, D.	289
New Line of Frequency-Division Multiplex Units for Carrier Systems Plügge, H.	29
Open and Closed-Loop Control of Drives for Ground Station Antennas Böhm, E.	204
Packaging System D for Data Communication and Automatic Feedback Control Systems Szolnoki, G.; Zaurith, F.	490
Power Supply of High-Performance Traveling-Wave Tubes for Satellites Palz, G.	294
Private Automatic Telephone Systems for the Beograd-Skopje Railway Line Vuksanović, S.	85
P2010 Test Set for PCM Transmission Systems Geier, U.; Schlosser, K.	440
R2020, a Digital Capacitance Unbalance Test Set for Communications Cables Fröscher, P.; Schlögl, K.	611
Siemens System 102 Private Automatic Branch Exchanges for Telex Communication Röscheisen, F.	497
SIEMENS TEAMSET 106, a Modular Key Telephone System Nieberler, A.	364

SIRAL, a Shapable Rectangular Waveguide with Very Low Reflection Coefficient Döhr, P.; Löw, W.	396
Some Remarks on Man's Telecommunication Needs v. Sanden, D.	462
Telegraph Signal Analyzer 2H3, a New Measuring Instrument for Telegraph and Data Communications Systems Chaillie, Ch.	500
The Antenna Drive and Drive Control System of the Helios Telecommand Station Schwarz, R.	200
Transmission Measuring Set K2020 for Telephone Systems Bauernfeind, K.; Hartmann, H.	534
Transmitter System for Pleumeur-Bodou Earth Station Germann, L.	353
Uniform Carrier Equipment for Narrowband, Cable and Radio Relay Systems Fütterer, H.G.	486

Components

LSI-MOS Device S181 for Motion-Picture Cameras Flagge, W.	553
Noise Measurements on Metallized Plastic Foil (MK) Capacitors for Nondestructive Detection of Material Defects Gottlob, H.	178
Silicon Snap-Off Varactor and Silicon Impatt Diode as GHz Power Oscillators Hammerschmitt, J.	44
Surge-Loading Units for Testing Pulse-Duty Capacitors Wohinz, W.	69
Temperature-Compensated Crystal Oscillators for 2 MHz to 60 MHz Förster, H.-J.	545

Control Equipment

Basic Elements and Logic Unit of URTL Circuit System U1 Wießell, R.	150
BERO Proximity Switches of IC Design Krimmling, H. J.; Walker, H.	453
Closed-Loop Control in a Refuse Incinerator Plant Hilsheimer, H.; Mettler, P.	537
Differential and Control Systems for Grabbing Cranes Carbon, L.	327
ES902 - The Fully Integrated Modular Packaging System for Industrial Electronics Equipment Leppert, K.; Roth, W.	333
Input/Output Signal Converter of URTL Circuit System U1 Pauly, A.	154
Integration of Electronic Components and Modules into Control Equipment and Electrical Machines Meyer, M.	448
Logic and Control Modules for the SIMADYN C Closed-Loop Control System Brcic, A.; Fischer, R.; Neumann, B.; Staber, F.	255
New Types of Monitoring and Control Equipment for Trace-Heated Reactor Plants Hans, R.	219

Open and Closed-Loop Control of Drives for Ground Station Antennas Böhm, E.	204	Central Processor and Input/Output System of the Unidata 7-750 Computer Köhler, M.; Spreen, H.	419
Plaintext Unit for the SIMATIC MD3 Event Recording System Bekaan, F.; Schüler, W.; Schulze, P.	444	Computer-Controlled AF Systems for the Exchange of Radio Programs between Members of the ARD Knöbel, B.; Wurl, P.; Zeiß, W.	348
Process Control Computers Applied to Track Diagram Interlockings Schmidt, J.	415	DATAREG, a Modular System for the Decentralized Acquisition and Recording of Data Lang, W.; Wenk, J.	266
Reliability of BERO Solid-State Proximity Switches under Field Conditions Reinhardt, M.	90	Design and Structure of the Unidata 7-730 Central Unit Sachs, H.; Strutynski, W.; Voigt, U.	106
SIMATIC C1 - A Rugged Static Switching System for Power Applications Breunig, H.; Engelhard, D.; Klein, S.	338	DICOM, a Microfilm Recording System for Computers Padberg, P.	423
SIMATIC S31 Stored-Program System for Logic and Sequence Control Rössel, P.; Walter, H.	550	Dynamic Behaviour and Drive Control of Large Antennas Simulated by Digital Computer Eschenauer, H.; Henning, G.; Tröndle, H.-P.	209
SINUMERIK 550C, a Numerical Control System Incorporating a PR310 Process Computer Basilowski, H.; Hoffmann, K.-R.	508	Electronics in Power Engineering Ernst, D.	241
SINUMERIK 520K - New Functions for Turning Operation Krempfer, D.; Richter, G.	522	FB40, and RC/S System for Long-Distance Communications Networks with Terminals for Display, Printer or Processor Gruchalla, A. v.; Herkert, H.	392
SINUMERIK 10-0, 20-0 and 30-0, a Range of Numerical Controls for Simple Machine Tools Mikulaschek, E.; Winkler, H.	525	Flat Cables as Transmission Elements for Digital Systems Schinko, H.	132
SIVOLT A Compact-Type A.C. Controllers with Phase-Angle Control Feature Eckardt, R.	457	Graphical Data Display System for Steam Generator Load Capability Bußmann, W.; Wölfel, H.	82
Spoorplan (geographical type) Interlocking System SpDrS U for Urban Railways Haseloff, D.; Meier, J.	183	High-Speed Bipolar 128-Bit Random-Access Memory Bürker, U.; Rydval, P.	402
The Antenna Drive and Drive Control System of the Helios Telecommand Station Schwarz, R.	200	Information Discrimination in the Measurement of Extremely Fast and Slow Phenomena Schuler, H.; Sima, H.	143
Thyristor Chopper Controls for D.C. Traction Systems Wagner, R.	39	Input/Output Signal Converter of URTL Circuit System U1 Pauly, A.	154
Timing and Monitoring Functions in URTL Circuit System U1 Kopperschmidt, G.	157	MAXITAPE, a Recorder of the DATAREG System Betz, E.; Haselbeck, W.; Marx, J.; Tschedanoff, N.	371
URLT Circuit System U1 with High Safety and Automatic Fault Diagnosis Lohmann, H.-J.	145	Modem N10 for Short-Haul Data Communication Gieck, R.; Grunow, D.	289
Voltage Regulation in Low-Voltage Systems Albert, H.	315	Modular System of Operating Elements for Electronic Equipment and Installations Morgott, H.	399
Conveying and Hoisting Equipment		Operating Systems of the Siemens 310, 320 and 330 Process Computers for Universal Automation Applications Benz, W.; Krause, K.-H.; Simang, B.	165
Differential and Control Systems for Grabbing Cranes Carbon, L.	327	Packaging System D for Data Communications and Automatic Feedback Control Systems Szolnoki, G.; Zaurith, F.	490
New Measuring Equipment for Electro-Mechanical Weighbelts Schwaier, A.	261	Plaintext Unit for the SIMATIC MD3 Event Recording System Bekaan, F.; Schüler, W.; Schulze, P.	444
Thyristor Converters Supply D.C. Motors Driving the Tracks of Giant Excavators Koopmann, K.; Lönne, G.	126	Process Control Computers Applied to Track Diagram Interlockings Schmidt, J.	415
Data Processing and Computers		PROTOCONT ZW3, an Acquisition System for Counter Readings Using LSI Circuits Buurman, E.; Görtz, B.	18
Automatic Tester K1060 for Monophonic and Stereophonic Program Circuits Epha, P.; Reitan, A.	270	Recording Modules of the DATAREG System Ratschmeier, D.; Rausch, M.; Stürzl, W.	435
Basic Elements and Logic Unit of URTL Circuit System U1 Wießell, R.	150	SICOGRAPH, Output Terminal for Colour Print-Outs Kraus, H.; Wiesmüller, S.	235
		7FS1 Reader for Magnetic Tape Cassettes of the DATAREG System Schalk, K.; Schmidt, G.	438

SINUMERIK 550C, a Numerical Control System Incorporating a PR 310 Process Computer	
Basilowski, H.; Hoffmann, K.-R.	508
System Software for the Siemens 310 Process Computer	
Rothbarth, U.; Schwarz, H.-H.	115
The 3976 Graphical Data Display Terminal Shows Plant Diagrams in Power Station Control Rooms	
Kalus, J.-G.; Wölfel, H.	119
The 310S Main Unit of the Siemens 310 Process Computer	
Dittmann, J.; Wolfgang, E.-R.	112
The Siemens 310 Process Computer	
Offer, U.; Scheider, U.	78
The Use of Computers in Floodlighting Design	
Dorn, M.; Roch, J.	429
Timing and Monitoring Functions in URTL Circuit System U1	
Kopperschmidt, G.	157
URLT Circuit System U1 with High Safety and Automatic Fault Diagnosis	
Lohmann, H.-J.	145

Electrical Machines

Integration of Electronic Components and Modules into Control Equipment and Electrical Machines	
Meyer, M.	448
Vibration and Noise Caused by Magnetic Forces	
Sperling, P.-G.	307

Electricity Meters

ERROTEST, an Error Calculator for Electricity Meters	
Oppen, H.; Walter, K.	58

Electromedical Engineering

Measures for Safety and Reliability of Electromedical Apparatus	
Krestel, E.	231

Electronics

Electronic Time Relays of the 7PV Range	
Münzing, H.-Ch.; Steinlein, H.-W.	161
Electronics in Power Engineering	
Ernst, D.	241
ES902 – The Fully Integrated Modular Packaging System for Industrial Electronics Equipment	
Leppert, K.; Roth, W.	333
Integration of Electronic Components and Modules into Control Equipment and Electrical Machines	
Meyer, M.	448
Modular System of Operating Elements for Electronic Equipment and Installations	
Morgott, H.	399
New Temperature Monitoring System for Large Three-Phase Machines	
Karkutt, M.; Kleinhans, S.	472

Generators/Generating Sets

Power Supply Systems for Special Vehicles	
Böhm, E.; Kirchpöfening, M.; Mader, M.; Prieß, A.	476

Insulation/Insulators

Measuring Equipment for Determining the Risk of Local Pollution Layers on H.V. Insulators	
Auxel, H.; Weiß, W.	20

Iron and Steel Works

The Use of Cycloconverters for Electroslag Refining Furnaces	
Thomas, F.W.; Schmidt, W.	299

Lighting

The Use of Computers in Floodlighting Design	
Dorn, M.; Roch, J.	429

Measuring Equipment

A Process Chromatograph for the Selective Measurement of Hydrocarbons	
Ball, H.; Müller, F.	344
Automatic Pollutant Measuring Network	
Birkle, M.	95
Automatic Transmission Measuring and Signaling Testing Equipment for International Telephone Circuits	
Adler, K.	493
Information Discrimination in the Measurement of Extremely Fast and Slow Phenomena	
Schuler, H.; Sima, H.	143
Large-Volume High-Performance Climatic Chamber for Ecological-Biological Research	
Koch, W.; Küfner, K.; Roth, H.	279
MAXITAPE, a Recorder of the DATAREG System	
Betz, E.; Haselbeck, W.; Marx, J.; Tschedanoff, N.	371
Measurement of Transient Variables at High Electrical Potentials	
Hederer, A.; Sima, H.	102
Measuring Equipment for Determining the Risk of Local Pollution Layers on H.V. Insulators	
Auxel, H.; Weiß, W.	20
Model D/W 2007 Precision Level Measuring Setup for 6 kHz to 18.6 MHz Carrier Systems	
Horvat, B.; Rauchenecker, K.	26
Modern Methods of Measuring the Ignition Angle of Petrol Engines	
Maringer, A.; Schulz, F.W.	55
New Measuring Equipment for Electro-Mechanical Weighbelts	
Schwaier, A.	261
New Type Sodium Flow Meter for Fuel Elements in Nuclear Power Stations	
Hans, R.	541
Noise Measurements on Metallized Plastic (MK) Capacitors for Nondestructive Detection of Material Defects	
Gottlob, H.	178
Permanent-Magnetic Sodium Flowmeters for Nuclear Power Stations	
Dorff, D.; Hans, R.	15
PROTOCONT ZW3, an Acquisition System for Counter Readings Using LSI Circuits	
Buurman, E.; Görtz, B.	18
P2010 Test Set for PCM Transmission Systems	
Geier, U.; Schlosser, K.	440

Recording Modules of the DATAREG System Ratschmeier, D.; Rausch, M.; Stürzl, W.	435	Sodium Contamination Measurement with Plugging Meter and Hydrogen Leak Detection System Hans, R.; Weiss, H.-J.	225
7FS1 Reader for Magnetic Tape Cassettes of the DATAREG System Schalk, K.; Schmidt, G.	438	Power Stations	
Sodium Contamination Measurement with Plugging Meter and Hydrogen Leak Detection System Hans, R.; Weiss, H.-J.	225	Graphical Data Display System for Steam Generator Load Capability Bußmann, W.; Wölfel, H.	82
Telegraph Signal Analyzer 2H3, a New Measuring Instrument for Telegraph and Data Communications Systems Chaillié, Ch.	500	The 3976 Graphical Data Display Terminal Shows Plant Diagrams in Power Station Control Rooms Kalus, J.-G.; Wölfel, H.	119
Transmission Measuring Set K 2020 for Telephone Systems Bauernfeind, K.; Hartmann, H.	534	Waldeck II Underground Pumped-Storage Station Richter, E.	249
Vibration Analysis with the Correlator Ringlage, P.	319	Power Supply Systems	
Vibration Analysis with the PROBABILITYMETER Ringlage, P.	139	A New Range of Modular Static Converters Höfler, E.; Reich, G.	387
Miscellaneous		A New Series of SIMOVERT Static Frequency Converters for the Synthetic Fibre Industry Kotzurek, W.; Krampe, D.	380
Hydraulic Starting Gear for Pump/Turbines Wolff, N.	74	New SIMOREG Compact Converter Units with Ratings between 150 and 480 kW Gröne, H.	391
LSI-MOS Device S181 for Motion-Picture Cameras Flagge, W.	553	Power Supply of High-Performance Traveling-Wave Tubes for Satellites Palz, G.	294
New Materials for Permanent Magnets Cremer, R.; Wagner, R.	458	Power Supply Systems for Special Vehicles Böhm, E.; Kirchnpfening, M.; Mader, M.; Prieß, A.	476
New Temperature Monitoring System for Large Three-Phase Machines Karkutt, M.; Kleinhans, S.	472	Power System Automation Müller, R.	65
Static Reactive Power Compensation for the Pulse Power Supply Plant of the CERN Booster Jahn, K.; Pahud, J.D.; Schlüter, W.	10	Push-Pull Transformers for Chopper-Type Power Supply Units Grätzer, D.	410
Vibration and Noise Caused by Magnetic Forces Sperling, P.-G.	307	Static Pulse Power Supply Plant for the Bending Magnets of the CERN Booster Pahud, J.D.; Schlüter, W.; Vau, G.	3
Motors		Static Reactive Power Compensation for the Pulse Power Supply Plant of the CERN Booster Jahn, K.; Pahud, J.D.; Schlüter, W.	10
A New Range of Unit-Construction Motors Amey, W.; Kleinhans, S.	467	Thyristor Converters Supply D.C. Motors Driving the Tracks of Giant Excavators Koopmann, K.; Lönne, G.	126
Linear Drive for Crash Test Facility Bleckert, H.; Mack, G.	303	Protective Equipment	
Maintenance-Free Tachogenerators for Variable-Speed Drives Volkrodt, W.	482	Electronic Time Relays of the 7PV Range Münzing, H.-Ch.; Steinlein, H.-W.	161
New Range of Self-Contained SIMOPAC Drives Böhnert, U.; Prieß, A.; Schnirch, F.; Vogel, G.	473	Flexible Tubing for Magnetic Shielding Boll, R.; Keller, H.	366
New Temperature Monitoring System for Large Three-Phase Machines Karkutt, M.; Kleinhans, S.	472	Rectifiers	
Thyristor Converters Supply D.C. Motors Driving the Tracks of Giant Excavators Koopmann, K.; Lönne, G.	126	Self-Ventilated Rectifiers for Traction Systems Bardahl, N.	273
Nuclear Energy		Research	
New Type Sodium Flow Meter for Fuel Elements in Nuclear Power Stations Hans, R.	541	Information Discrimination in the Measurement of Extremely Fast and Slow Phenomena Schuler, H.; Sima, H.	143
New Types of Monitoring and Control Equipment for Trace-Heated Reactor Plants Hans, R.	219	Large-Volume High-Performance Climatic Chamber for Ecological-Biological Research Koch, W.; Küfner, K.; Roth, H.	279
Permanent-Magnetic Sodium Flowmeters for Nuclear Power Stations Dorff, D.; Hans, R.	15		

Space Technology

Open and Closed-Loop Control of Drives for Ground Station Antennas Böhm, E.	204
Power Supply of High-Performance Traveling-Wave Tubes for Satellites Palz, G.	294
The Antenna Drive and Drive Control System of the Helios Telecommand Station Schwarz, R.	200
Transmitter System for Pleumeur-Bodou Earth Station Germann, L.	353

Telegraphy

Siemens System 102 Private Automatic Branch Exchanges for Telex Communication Röscheisen, F.	497
Telegraph Signal Analyzer 2H3, a New Measuring Instrument for Telegraph and Data Communications Systems Chaillié, Ch.	500

Telephony

An Automatic Tester for STD Trunks Beck, J.; Finfera, W.; Fink, H.	285
Automatic Transmission Measuring and Signaling Testing Equipment ATME 2 for International Telephone Circuits Adler, K.	493
ESB400, a New SSB System for Telephony and Data Communication over Power Grids Beckermann, H.-G.; Hoffmann, E.	375
Private Automatic Telephone Systems for the Beograd-Skopje Railway Line Vuksanović, S.	85
SIEMENS TEAMSET 106, a Modular Key Telephone System Nieberler, A.	364
Transmission Measuring Set K2020 for Telephone Systems Bauernfeind, K.; Hartmann, H.	534

Television

Local Broadband Communication Networks Birkenschenkel, H.; Nerenz, W.	216
---	-----

Tests/Testing Equipment

An Automatic Tester for STD Trunks Beck, J.; Finfera, W.; Fink, H.	285
Automatic Tester K1060 for Monophonic and Stereophonic Program Circuits Epha, P.; Reitan, A.	270
Automatic Transmission Measuring and Signaling Testing Equipment for International Telephone Circuits Adler, K.	493
ERROTEST, an Error Calculator for Electricity Meters Oppen, H.; Walter, K.	58

Linear Drive for Crash Test Facility Bleckert, H.; Mack, G.	303
P2010 Test Set for PCM Transmission Systems Geier, U.; Schlosser, K.	440
R2020, a Digital Capacitance Unbalance Test Set for Communications Cables Fröscher, P.; Schlögl, K.	61
Surge-Loading Units for Testing Pulse-Duty Capacitors Wohinz, W.	69

Thyristors and Static Converters

A New Range of Modular Static Converters Höfler, E.; Reich, G.	387
A New Series of SIMOVERT Static Frequency Converters for the Synthetic Fibre Industry Kotzurek, W.; Krampe, D.	380
Disk-Type Power Semiconductor Devices and their Possible Applications Lehmann, E.; Martin, H.	170
New Range of Self-Contained SIMOPAC Drives Böhnert, U.; Prieß, A.; Schnirch, F.; Vogel, G.	473
New SIMOREG Compact Converter Units with Ratings between 150 and 480 kW Gröne, H.	391
Static Pulse Power Supply Plant for the Bending Magnets of the CERN Booster Pahud, J.D.; Schlüter, W.; Vau, G.	3
The Use of Cycloconverters for Electroslag Refining Furnaces Thomas, F.-W.; Schmidt, W.	299
Thyristor Chopper Controls for D.C. Traction Systems Wagner, R.	39
Thyristor Converters Supply D.C. Motors Driving the Tracks of Giant Excavators Koopmann, K.; Lönne, G.	126

Transformers

Current Transformers with Linear Cores Rosenberger, G.	168
Push-Pull Transformers for Chopper-Type Power Supply Units Grätzer, D.	410

Transportation

Automatically Controlled Unloaders for Seagoing Vessels Trautnitz, W.	33
Communications Cable for First Electrified Lines of Korean State Railways Rachel, H.	358
Power Supply Systems for Special Vehicles Böhm, E.; Kirchpfering, M.; Mader, M.; Prieß, A.	476
Private Automatic Telephone Systems for the Beograd-Skopje Railway Line Vuksanović, S.	85

Process Control Computers Applied to Track Diagram Interlockings Schmidt, J.	415	URTL Circuit System U1 with High Safety and Automatic Fault Diagnosis Lohmann, H.-J.	145
PROTOCONT ZW3, an Acquisition System for Counter Readings Using LSI Circuits Buurman, E.; Görtz, B.	18	Turbines	
Self-Ventilated Rectifiers for Traction Systems Bardahl, N.	273	Hydraulic Starting Gear for Pump/Turbines Wolff, N.	74
Spoorplan (geographical type) Interlocking System SpDrSU for Urban Railway Haseloff, D.; Meier, J.	183	X-Ray and Electron Microscopy	
Thyristor Chopper Controls for D.C. Traction Systems Wagner, R.	39	New Equipment for X-Ray Analyses Hellgardt, J.; Krüger, W.; Müller, H.	51

Pictorial Reports

Helios – Rendezvous with the sun (Pictorial Report)	190
SINUMERIK – Built-in reliability (Pictorial Report)	514

Book reviews

Introduction to Telegraph Engineering	136
Design of Automatic Telephone Exchanges	324
Power Cables and their Application	368

Index to Authors

- Adler, K.:
Automatic Transmission Measuring and Signaling Testing
Equipment ATME 2 for International Telephone Circuits 493
- Albert, H.:
Voltage Regulation in Low-Voltage Systems 315
- Albrecht, K.; Sondermann, E.:
Automation in Timber Yards 123
- Amey, W.; Kleinhans, S.:
A New Range of Unit-Construction Motors 467
- Auxel, H.; Weiß, W.:
Measuring Equipment for Determining the Risk
of Local Pollution Layers on H.V. Insulators 20
- Ball, H.; Müller, F.:
A Process Chromatograph for the Selective Measurement
of Hydrocarbons 344
- Bardahl, N.:
Self-Ventilated Rectifiers for Traction Systems 273
- Basilowski, L.H.; Hoffmann, K.-R.:
SINUMERIK 550C, a Numerical Control System
Incorporating a PR310 Process Computer 508
- Bauernfeind, K.; Hartmann, H.:
Transmission Measuring Set K2020 for Telephone Systems 534
- Beck, J.; Finfera, W.; Fink, H.:
An Automatic Tester for STD Trunks 285
- Beckermann, H.-G.; Hoffmann, E.:
ESB400, a New SSB System for Telephone
and Data Communication over Power Grids 375
- Bekaan, F.; Schüler, W.; Schulze, P.:
Plaintext Unit for the SIMATIC MD3 Event Recording System 444
- Benz, W.; Krause, K.-H.; Simang, B.:
Operating Systems of the Siemens 310, 320 and 330
Process Computers for Universal Automation Applications 165
- Betz, E.; Haselbeck, W.; Marx, J.; Tshedanoff, N.:
MAXITAPE, a Recorder of the DATAREG System 371
- Birkenschenkel, H.; Nerenz, W.:
Local Broadband Communication Networks 216
- Birkle, M.:
Automatic Pollutant Measuring Network 95
- Bleckert, H.; Mack, G.:
Linear Drive for Crash Test Facility 303
- Böhm, E.:
Open and Closed-Loop Control of Drives
for Ground Station Antennas 204
- Böhm, E.; Kirchpfening, M.; Mader, M.; Prieß, A.:
Power Supply Systems for Special Vehicles 476
- Böhnert, U.; Prieß, A.; Schnirch, F.; Vogel, G.:
New Range of Self-Contained SIMOPAC Drives 473
- Boll, R.; Keller, H.:
Flexible Tubing for Magnetic Shielding 366
- Brcic, A.; Fischer, R.; Neumann, B.; Staber, F.:
Logic and Control Modules
for the SIMADYN C Closed-Loop Control System 255
- Breunig, H.; Engelhard, D.; Klein, S.:
SIMATIC C1 - A Rugged Static Switching System
for Power Applications 338
- Bürker, U.; Rydval, P.:
High-Speed Bipolar 128-Bit Random-Access Memory 402
- Bußmann, W.; Wölfel, H.:
Graphical Data Display System
for Steam Generator Load Capability 82
- Buurman, E.; Görtz, B.:
PROTOCONT ZW3, an Acquisition System
for Counter Readings Using LSI Circuits 18
- Carbon, L.:
Differential and Control Systems for Grabbing Cranes 327
- Chaillié, Ch.:
Telegraph Signal Analyzer 2H3, a New Measuring Instrument
for Telegraph and Data Communications Systems 500
- Cremer, R.; Wagner, R.:
New Materials for Permanent Magnets 458
- Dittmann, J.; Wolfgang, E.-R.:
The 310S Main Unit of the Siemens 310 Process Computer 112
- Döhr, P.; Löw, W.:
SIRAL, a Shapable Rectangular Waveguide
with Very Low Reflection Coefficient 396
- Dorff, D.; Hans, R.:
Permanent-Magnetic Sodium Flowmeters
for Nuclear Power Stations 15
- Dorn, M.; Roch, J.:
The Use of Computers in Floodlighting Design 429
- Eckardt, R.:
SIVOLT A Compact-Type A.C. Controllers
with Phase-Angle Control Feature 457
- Ecker, E.; Ruschitzka, E.; Schweikert, H.:
Automatic Fraction Collector for Liquid Chromatography 530
- Engelhard, D.; Breunig, H.; Klein, S.:
SIMATIC C1 - A Rugged Static Switching System
for Power Applications 388
- Epha, P.; Reitan, A.:
Automatic Tester K1060 for Monophonic
and Stereophonic Program Circuits 270
- Ernst, D.:
Electronics in Power Engineering 241
- Eschenauer, H.; Henning, G.; Tröndle, H.-P.:
Dynamic Behaviour and Drive Control
of Large Antennas Simulated by Digital Computer 209
- Finfera, W.; Beck, J.; Fink, H.:
An Automatic Tester for STD Trunks 285
- Fink, H.; Beck, J.; Finfera, W.:
An Automatic Tester for STD Trunks 285
- Fischer, R.; Brcic, A.; Neumann, B.; Staber, F.:
Logic and Control Modules for the SIMADYN C
Closed-Loop Control System 255
- Flagge, W.:
LSI-MOS Device S181 for Motion-Picture Cameras 553
- Förster, H.-J.:
Temperature-Compensated Crystal Oscillators
for 2 MHz to 60 MHz 545
- Fröscher, P.; Schlögl, K.:
R2020, a Digital Capacitance Unbalance Test Set
for Communications Cables 61

Fütterer, H.G.: Uniform Carrier Equipment for Narrowband, Cable and Radio Relay Systems	486	Herkert, H.; Gruchalla, A. v.: FB40, an RC/S System for Long-Distance Communications Networks with Terminals for Display, Printer or Processor	392
Geier, U.; Schlosser, K.: P2010 Test Set for PCM Transmission Systems	440	Hilsheimer, H.; Mettler, P.: Closed-Loop Control in a Refuse Incinerator Plant	537
Germann, L.: Transmitter System for Pleumeur-Bodou Earth Station	353	Hoffmann, E.; Beckermann, H.-G.: ESB400, a New SSB System for Telephony and Data Communication over Power Grids	375
Geyer, F.: Mineral-Insulated Cables	409	Hoffmann, K.-R.; Basilowski, H.: SINUMERIK 550C, a Numerical Control System Incorporating a PR310 Process Computer	508
Gieck, R.; Grunow, D.: Modem N10 for Short-Haul Data Communication	289	Höfler, E.; Reich, G.: A New Range of Modular Static Converters	387
Görtz, B.; Buurman, E.: PROTOCONT ZW3, an Acquisition System for Counter Readings Using LSI Circuits	18	Horvat, B.; Rauchenecker, K.: Model D/W 2007 Precision Level Measuring Setup for 6 kHz to 18.6 MHz Carrier Systems	26
Gottlob, H.: Noise Measurements on Metallized Plastic Foil (MK) Capacitors for Nondestructive Detection of Material Defects	178	Jahn, K.; Pahud, J.D.; Schlüter, W.: Static Reactive Power Compensation for the Pulse Power Supply Plant of the CERN Booster	10
Grätzer, D.: Push-Pull Transformers for Chopper-Type Power Supply Units	410	Kalus, J.-G.; Wölfel, H.: The 3976 Graphical Data Display Terminal Shows Plant Diagrams in Power Station Control Rooms	119
Gröne, H.: New SIMOREG Compact Converter Units with Ratings between 150 and 480 kW	391	Karkutt, M.; Kleinhans, S.: New Temperature Monitoring System for Large Three-Phase Machines	472
Gruchalla, A. v.; Herkert, H.: FB40, and RC/S System for Long-Distance Communications Networks with Terminals for Display, Printer or Processor	392	Keller, H.; Boll, R.: Flexible Tubing for Magnetic Shielding	366
Grunow, D.; Gieck, R.: Modem N10 for Short-Haul Data Communication	289	Kirchpfering, M.; Böhm, E.; Mader, M.; Prieß, A.: Power Supply Systems for Special Vehicles	476
Hammerschmitt, J.: Silicon Snap-Off Varactor and Silicon Impatt Diode as GHz Power Oscillators	44	Klein, S.; Breunig, H.; Engelhard, D.: SIMATIC C1 – A Rugged Static Switching System for Power Applications	338
Hans, R.: New Type Sodium Flow Meter for Fuel Elements in Nuclear Power Stations	541	Kleinhans, S.; Amey, W.: A New Range of Unit-Construction Motors	467
Hans, R.: New Types of Monitoring and Equipment Control for Trace-Heated Reactor Plants	219	Kleinhans, S.; Karkutt, M.: New Temperature Monitoring System for Large Three-Phase Machines	472
Hans, R.; Dorff, D.: Permanent-Magnetic Sodium Flowmeters for Nuclear Power Stations	15	Knöbel, B.; Würl, P.; Zeiß, W.: Computer-Controlled AF System for the Exchange of Radio Programs between Members of the ARD	348
Hans, R.; Weiss, H.-J.: Sodium Contamination Measurement with Plugging Meter and Hydrogen Leak Detection System	225	Koch, W.; Küfner, K.; Roth, H.: Large-Volume High-Performance Climatic Chamber for Ecological-Biological Research	279
Hartmann, H.; Bauernfeind, K.: Transmission Measuring Set K2020 for Telephone Systems	534	Köhler, M.; Sreen, H.: Central Processor and Input/Output System of the Unidata 7-750 Computer	419
Haselbeck, W.; Betz, E.; Marx, J.; Tshedano, N.: MAXITAPE, a Recorder of the DATAREG System	371	Koopmann, K.; Lönne, G.: Thyristor Converters Supply D.C. Motors Driving the Tracks of Giant Excavators	126
Haseloff, D.; Meier, J.: Spoorplan (geographical type) Interlocking System SpDrS U for Urban Railways	183	Kopperschmidt, G.: Timing and Monitoring Functions in URTL Circuit System U1	157
Hederer, A.; Sima, H.: Measurement of Transient Variables at High Electrical Potentials ...	102	Kotzurek, W.; Krampe, D.: A New Series of SIMOVERT Static Frequency Converters for the Synthetic Fibre Industry	380
Hellgardt, J.; Krüger, W.; Müller, H.: New Equipment for X-Ray Analyses	51	Krampe, D.; Kotzurek, W.: A New Series of SIMOVERT Static Frequency Converters for the Synthetic Fibre Industry	380

Kraus, H.; Wiesmüller, S.: SICOGRAPH, Output Terminal for Colour Print-Outs	235	Müller, F.; Ball, H.: A Process Chromatograph for the Selective Measurement of Hydrocarbons	344
Krause, K.-H.; Benz, W.; Simang, B.: Operating Systems of the Siemens 310, 320 and 330 Process Computers for Universal Automation Applications	165	Müller, H.; Hellgardt, J.; Krüger, W.: New Equipment for X-Ray Analyses	51
Kremper, D.; Richter, G.: SINUMERIK 520 K – New Functions for Turning Operation	522	Müller, R.: Power System Automation	65
Krestel, E.: Measures for Safety and Reliability of Electromedical Apparatus ...	231	Münzing, H.-Ch.; Steinlein, H.-W.: Electronic Time Relays of the 7 PV Range	161
Krimmling, H. J.; Walker, H.: BERO Proximity Switches of IC Design	453	Nerenz, W.; Birkenschenkel, H.: Local Broadband Communication Networks	216
Krüger, W.; Hellgardt, J.; Müller, H.: New Equipment for X-Ray Analyses	51	Neumann, B.; Brcic, A.; Fischer, R.; Staber, F.: Logic and Control Modules for the SIMADYN C Closed-Loop Control System	255
Küfner, K.; Koch, W.; Roth, H.: Large-Volume High-Performance Climatic Chamber for Ecological-Biological Research	279	Nieberler, A.: SIEMENS TEAMSET 106, a Modular Key Telephone System	364
Lang, W.; Wenk, J.: DATAREG, a Modular System for the Decentralized Acquisition and Recording of Data	266	Offer, U.; Scheider, U.: The Siemens 310 Process Computer	78
Lehmann, E.; Martin, H.: Disk-Type Power Semiconductor Devices and their Possible Applications	170	Oppen, H.; Walter, K.: ERROTEST, an Error Calculator for Electricity Meters	58
Leppert, K.; Roth, W.: ES902 – The Fully Integrated Modular Packaging System for Industrial Electronics Equipment	333	Padberg, P.: DICOM, a Microfilm Recording System for Computers	423
Lohmann, H.-J.: URTL Circuit System U1 with High Safety and Automatic Fault Diagnosis	145	Pahud, J.D.; Jahn, K.; Schlüter, W.: Static Reactive Power Compensation for the Pulse Power Supply Plant of the CERN Booster	10
Lönne, G.; Koopmann, K.: Thyristor Converters Supply D.C. Motors Driving the Tracks of Giant Excavators	126	Pahud, J.D.; Schlüter, W.; Vau, G.: Static Pulse Power Supply Plant for the Bending Magnets of the CERN Booster	3
Löw, W.; Döhr, P.: SIRAL, a Shapable Rectangular Waveguide with Very Low Reflection Coefficient	396	Palz, G.: Power Supply of High-Performance Traveling-Wave Tubes for Satellites	294
Mack, G.; Bleckert, H.: Linear Drive for Crash Test Facility	303	Pauly, A.: Input/Output Signal Converter of URTL Circuit System U1	154
Mader, M.; Böhm, E.; Kirchpöfening, M.; Prieß, A.: Power Supply Systems for Special Vehicles	476	Plügge, H.: New Line of Frequency-Division Multiplex Units for Carrier Systems	29
Maringer, A.; Schulz, F.W.: Modern Methods of Measuring the Ignition Angle of Petrol Engines	55	Prieß, A.; Böhm, E.; Kirchpöfening, M.; Mader, M.: Power Supply Systems for Special Vehicles	476
Martin, H.; Lehmann, E.: Disk-Type Power Semiconductor Devices and their Possible Applications	170	Prieß, A.; Böhnert, U.; Schnirch, F.; Vogel, G.: New Range of Self-Contained SIMOPAC Drives	473
Marx, J.; Betz, E.; Haselbeck, W.; Tshedanoff, N.: MAXITAPE, a Recorder of the DATAREG System	371	Rachel, H.: Communications Cable for First Electrified Lines of Korean State Railways	358
Meier, J.; Haseloff, D.: Sporplan (geographical type) Interlocking System SpDrSU for Urban Railways	183	Ratschmeier, D.; Rausch, M.; Stürzl, W.: Recording Modules of the DATAREG System	435
Mettler, P.; Hilsheimer, H.: Closed-Loop Control in a Refuse Incinerator Plant	537	Rauchenecker, K.; Horvat, B.: Model D/W 2007 Precision Level Measuring Setup for 6 kHz to 18.6 MHz Carrier Systems	26
Meyer, M.: Integration of Electronic Components and Modules into Control Equipment and Electrical Machines	448	Rausch, M.; Ratschmeier, D.; Stürzl, W.: Recording Modules of the DATAREG System	435
Mikulaschek, E.; Winkler, H.: SINUMERIK 10-0, 20-0 and 30-0, a Range of Numerical Controls for Simple Machine Tools	525	Reich, G.; Höfler, E.: A New Range of Modular Static Converters	387
Morgott, H.: Modular System of Operating Elements for Electronic Equipment and Installations	399	Reinhardt, M.: Reliability of BERO Solid-State Proximity Switches under Field Conditions	90
		Reitan, A.; Epha, P.: Automatic Tester K1060 for Monophonic and Stereophonic Program Circuits	270

Richter, E.: Waldeck II Underground Pumped-Storage Station	249	Schmidt, J.: Process Control Computers Applied to Track Diagram Interlockings	415
Richter, G.; Kremper, D.: SINUMERIK 520K – New Functions for Turning Operation	522	Schmidt, W.; Thomas, F.-W.: The Use of Cycloconverters for Electroslag Refining Furnaces	299
Ringlage, P.: Vibration Analysis with the Correlator	319	Schnirch, F.; Böhnert, U.; Prieß, A.; Vogel, G.: New Range of Self-Contained SIMOPAC Drives	473
Ringlage, P.: Vibration Analysis with the PROBABILITYMETER	139	Schuler, H.; Sima, H.: Information Discrimination in the Measurement of Extremely Fast and Slow Phenomena.....	143
Roch, J.; Dorn, M.: The Use of Computers in Floodlighting Design	429	Schüler, W.; Bekaam, F.; Schulze, P.: Plaintext Unit for the SIMATIC MD3 Event Recording System	444
Röscheisen, F.: Siemens System 102 Private Automatic Branch Exchanges for Telex Communication	497	Schulz, F.W.; Maringer, A.: Modern Methods of Measuring the Ignition Angle of Petrol Engines	55
Rosenberger, G.: Current Transformers with Linear Cores	168	Schulze, P.; Bekaam, F.; Schüler, W.: Plaintext Unit for the SIMATIC MD3 Event Recording System	444
Rössel, P.; Walter, H.: SIMATIC S31 Stored-Program System for Logic and Sequence Control	550	Schwaier, A.: New Measuring Equipment for Electro-Mechanical Weighbelts.....	261
Roth, H.; Koch, W.; Küfner, K.: Large-Volume High-Performance Climatic Chamber for Ecological-Biological Research	279	Schwarz, H.-H.; Rothbarth, U.: System Software for the Siemens 310 Process Computer	115
Roth, W.; Leppert, K.: ES902 – The Fully Integrated Modular Packaging System for Industrial Electronics Equipment	333	Schwarz, R.: The Antenna Drive and Drive Control System of the Helios Telecommand Station.....	200
Rothbarth, U.; Schwarz, H.-H.: System Software for the Siemens 310 Process Computer	115	Schweikert, H.; Ecker, E.; Ruschitzka, E.: Automatic Fraction Collector for Liquid Chromatography	530
Ruschitzka, E.; Ecker, E.; Schweikert, H.: Automatic Fraction Collector for Liquid Chromatography	530	Sima, H.; Hederer, A.: Measurement of Transient Variables at High Electrical Potentials ...	102
Rydval, P.; Bürker, U.: High-Speed Bipolar 128-Bit Random-Access Memory	402	Sima, H.; Schuler, H.: Information Discrimination in the Measurement of Extremely Fast and Slow Phenomena.....	143
Sachs, H.; Strutynski, W.; Voigt, U.: Design and Structure of the Unidata 7·730 Central Unit	106	Simang, B.; Benz, W.; Krause, K.-H.: Operating Systems of the Siemens 310, 320 and 330 Process Computers for Universal Automation Applications	165
v. Sanden, D.: Some Remarks on Man's Telecommunication Needs	462	Sondermann, E.; Albrecht, K.: Automation in Timber Yards	123
Schalk, K.; Schmidt, G.: 7FS1 Reader for Magnetic Tape Cassettes of the DATAREG System..	438	Sperling, P.-G.: Vibration and Noise Caused by Magnetic Forces	307
Scheider, U.; Offer, U.: The Siemens 310 Process Computer	78	Spren, H.; Köhler, M.: Central Processor and Input/Output System of the Unidata 7·750 Computer	419
Schinko, H.: ETFE-Insulated Wires	407	Staber, F.; Brcic, A.; Fischer, R.; Neumann, B.: Logic and Control Modules for the SIMADYN C Closed-Loop Control System	255
Schinko, H.: Flat Cables as Transmission Elements for Digital Systems	132	Steinlein, H.-W.; Münzing, H.-Ch.: Electronic Time Relays of the 7PV Range	161
Schlögl, K.; Fröscher, P.: R2020, a Digital Capacitance Unbalance Test Set for Communications Cables	61	Strutynski, W.; Sachs, H.; Voigt, U.: Design and Structure of the Unidata 7·730 Central Unit	106
Schlosser, K.; Geier, U.: P2010 Test Set for PCM Transmission Systems	440	Stürzl, W.; Ratschmeier, D.; Rausch, M.: Recording Modules of the DATAREG System	435
Schlüter, W.; Jahn, K.; Pahud, J.D.: Static Reactive Power Compensation for the Pulse Power Supply Plant of the CERN Booster	10	Szolnoki, G.; Zaurith, F.: Packaging System D for Data Communication and Automatic Feedback Control Systems	490
Schlüter, W.; Pahud, J.D.; Vau, G.: Static Pulse Power Supply Plant for the Bending Magnets of the CERN Booster	3	Thomas, F.W.; Schmidt, W.: The Use of Cycloconverters for Electroslag Refining Furnaces	299
Schmidt, G.; Schalk, K.: 7FS1 Reader for Magnetic Tape Cassettes of the DATAREG System..	438	Trautnitz, W.: Automatically Controlled Unloaders for Seagoing Vessels	33

Tröndle, H.-P.; Eschenauer, H.; Henning, G.: Dynamic Behaviour and Drive Control of Large Antennas Simulated by Digital Computer	209	Weiß, W.; Auxel, H.: Measuring Equipment for Determining the Risk of Local Pollution Layers on H.V. Insulators	20
Tschedanoff, N.; Betz, E.; Haselbeck, W.; Marx, J.: MAXITAPE, a Recorder of the DATAREG System	371	Wenk, J.; Lang, W.: DATAREG, a Modular System for the Decentralized Acquisition and Recording of Data	266
Vau, G.; Pahud, J.D.; Schlüter, W.: Static Pulse Power Supply Plant for the Bending Magnets of the CERN Booster	3	Wiesmüller, S.; Kraus, H.: SICOGRAPH, Output Terminal for Colour Print-Outs	235
Vogel, G.; Böhnert, U.; Prieß, A.; Schnirch, F.: New Range of Self-Contained SIMOPAC Drives	473	Wießell, R.: Basic Elements and Logic Unit of URTL Circuit System U1	150
Voigt, U.; Sachs, H.; Strutynski, W.: Design and Structure of the Unidata 7·730 Central Unit	106	Winkler, H.; Mikulaschek, E.: SINUMERIK 10-0, 20-0 and 30-0, a Range of Numerical Controls for Simple Machine Tools	525
Volkrodt, W.: Maintenance-Free Tachogenerators for Variable-Speed Drives	482	Wohinz, W.: Surge-Loading Units for Testing Pulse-Duty Capacitors	69
Vuksanović, S.: Private Automatic Telephone Systems for the Beograd-Skopje Railway Line	85	Wölfel, H.; Bußmann, W.: Graphical Data Display System for Steam Generator Load Capability	82
Wagner, R.: Thyristor Chopper Controls for D.C. Traction Systems	39	Wölfel, H.; Kalus, J.-G.: The 3976 Graphical Data Display Terminal Shows Plant Diagrams in Power Station Control Rooms	119
Wagner, R.; Cremer, R.: New Materials for Permanent Magnets	458	Wolff, N.: Hydraulic Starting Gear for Pump/Turbines	74
Walker, H.; Krimmling, H. J.: BERO Proximity Switches of IC Design	453	Wolfgang, E.-R.; Dittmann, J.: The 310S Main Unit of the Siemens 310 Process Computer	112
Walter, H.; Rössel, P.: SIMATIC S31 Stored-Program System for Logic and Sequence Control	550	Wurll, P.; Knöbel, B.; Zeiß, W.: Computer-Controlled AF System for the Exchange of Radio Programs between Members of the ARD	348
Walter, K.; Oppen, H.: ERROTEST, an Error Calculator for Electricity Meters	58	Zaunrith, F.; Szolnoki, G.: Packaging System D for Data Communication and Automatic Feedback Control Systems	490
Weiss, H.-J.; Hans, R.: Sodium Contamination Measurement with Plugging Meter and Hydrogen Leak Detection System	225	Zeiß, W.; Knöbel, B.; Wurll, P.: Computer-Controlled AF System for the Exchange of Radio Programs between Members of the ARD	348